

Notice of Allowability

Application No.

09/683,720

Examiner

K. Feggins

Applicant(s)

MILLER, JOHN R.

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 4/29/2004.
2. ☒ The allowed claim(s) is/are 2-29.
3. ☒ The drawings filed on 11 March 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: The primary reason for allowance of claims 2-12 is the inclusion of the method step of processing a thermal element group to create a printed image that includes providing printing parameters for a supply for providing a microprobe number and microprobe energy values; generating a packed table the packed table having values based on the supply Printing parameters, selected thermal element group, the dot history pattern and the thermal element number and storing the packed table in a printer memory for use in creating a printed image. It is these steps found in each of the claims, as they are claimed in the combination of, which has not been found, taught or suggested by the prior art of record that makes these claims allowable.

The primary reason for allowance of claims 13-22 is the inclusion of the method step of processing a thermal element group to create a printed image that includes creating a packed index having a packed index length, the packed index length based on the packed thermal element number, and determining packed index values to occupy the packed index length, the packed index values based on the packed dot history pattern; dividing microstrokes, the microstrokes based on the microstroke number stored in the printer memory, such that divided microstrokes are produced; assigning packed binary pulse numbers to the divided microstrokes based on a strobe pattern, the packed binary pulse numbers corresponding to each of the packed index values occupying the packed index length; and determining packed strobe numbers based on the packed binary pulse numbers, the packed strobe numbers corresponding

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to each of the packed index values occupying the packed index length, wherein the printed image is created by using a bit map pattern, the packed dot history pattern, the packed index values, the packed strobe numbers, and the microstrobe energy values. It is these steps found in each of eh claims, as they are claimed in the combination of, which has not been found, taught or suggested by the prior art of record that makes these claims allowable.

The primary reason for allowance of claims 23-29 is the inclusion of the method step of processing a thermal element group to create a printed image that includes creating a packed index having a packed index length, the packed index length based on the packed thermal element number, and determining packed index values to occupy the packed index length, the packed index values based on the packed dot history pattern; dividing microstrokes, the microstrokes based on the microstroke number stored in the printer memory, such that divided microstrokes are produced; assigning packed binary pulse numbers to the divided microstrokes based on a strobe pattern, the packed binary pulse numbers corresponding to each of the packed index values occupying the packed index length; determining packed strobe numbers based on the packed binary pulse numbers, the packed strobe numbers corresponding to each of the packed index values occupying the packed index length, until an entire raster line of packed strobe numbers is ascertained, wherein the printed image is created by using a bit map pattern, the packed dot history pattern, the packed index values, the entire raster lines of the packed strobe numbers, and the microstrobe energy values. It is these steps found in each of eh claims, as they are claimed in the combination of, which

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has not been found, taught or suggested by the prior art of record that makes these claims allowable.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Spano (US 6404452 B1) disclose an auxiliary control device for managing printing in a thermal printer. Yamamoto et al. (US 5038154) disclose driving an apparatus in accordance with the heating element energization patterns.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

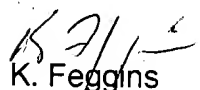
Communication With The USPTO

Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Feggins whose telephone number is 571-272-2254.

The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


K. Feggins
May 13, 2004